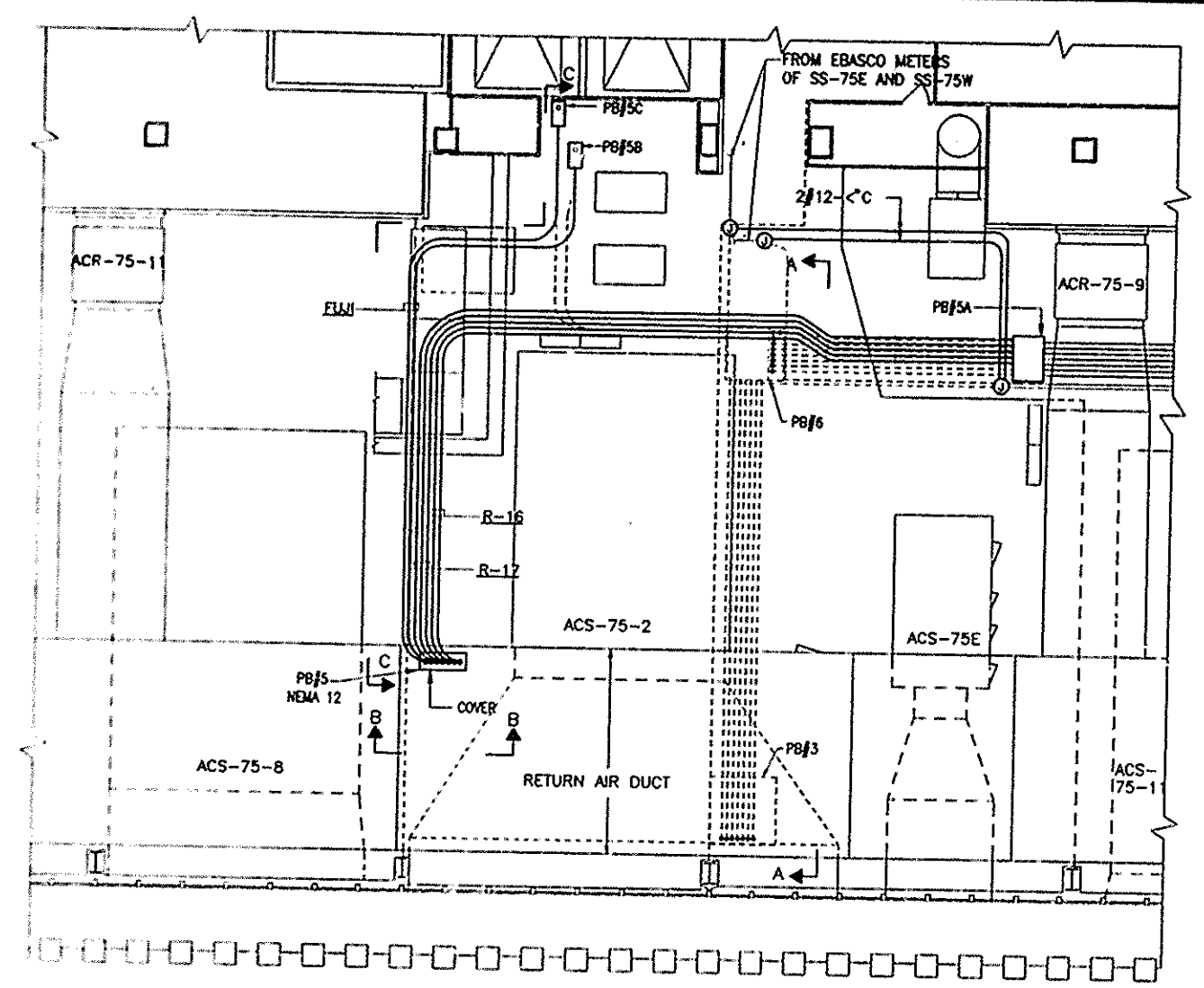
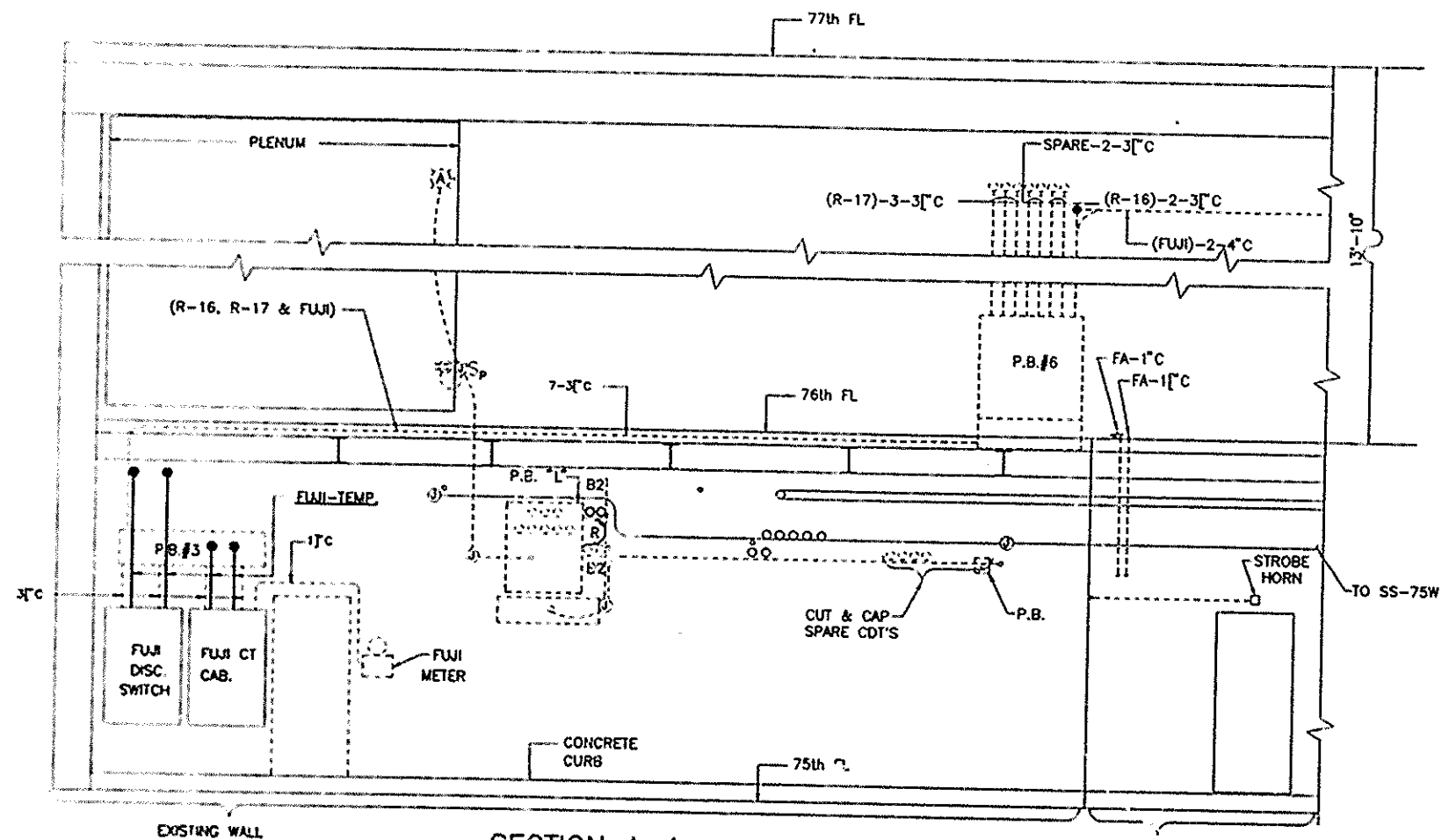


PA-SHT REV 5



PLAN-76th FL.-SS-75E



SECTION A-A

SEQUENCE OF INSTALLATION-STAGE I
FDR'S R-16, R-17, FUJI, L-1, L-7 & R-2

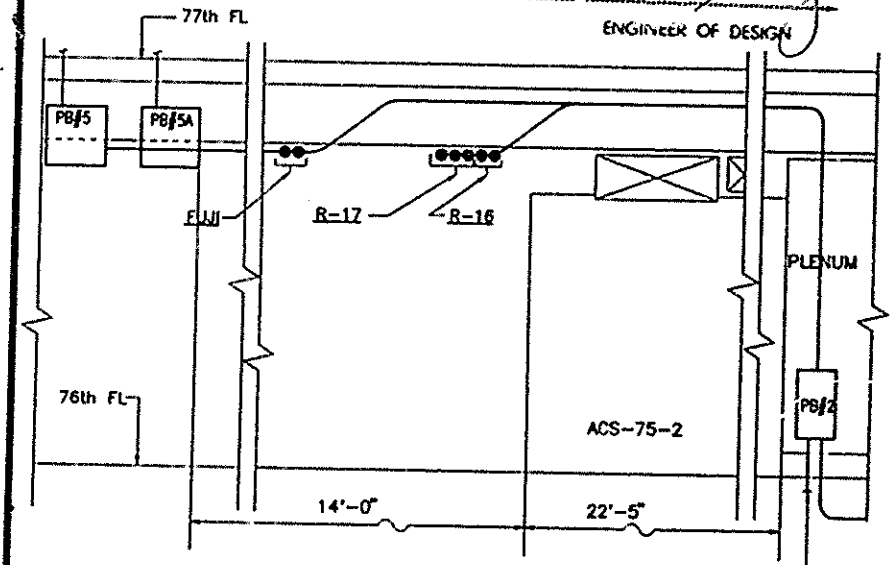
- R-16, R-17** -- EBASCO-ATS
- a. - INSTALL PB#1, PB#5 & CDT'S R-16-TEMP, R-17-TEMP.
 - b. - INSTALL CONDUCTORS R-16-TEMP & R-17-TEMP FROM PB#5 TO EBASCO PNL.
 - c. - CUT AND REMOVE CONDUITS AND CONDUCTORS AS SHOWN.
 - d. - INSTALL PB#5A & CDT'S R-16, R-17 AS SHOWN.
 - e. - INSTALL CONDUCTORS R-16 & R-17 FROM PB#5A TO PB#5.
 - f. - DISCONNECT CONDUCTORS AT EBASCO PNL.
 - g. - SPLICE AND CONNECT CONDUCTORS IN PB#5A, PB#5 AND EBASCO PANEL (ENERGIZE).
- FUJI** -- FUJI PANEL PP-81B (FEEDS UPS)
- a. - DEENERGIZE COLLECTOR BUS.
 - b. - DISCONNECT AND REMOVE FEEDER AT EBASCO PANEL AND REENERGIZE COLLECTOR BUS.
 - c. - REMOVE FDR'S, PB#3 AND PB#6 AS SHOWN.
 - d. - INSTALL PB#5B, #5C AND CONDUITS AS SHOWN.
 - e. - INSTALL FDR FUJI-TEMP FROM PB#5 TO FUJI DISC. SW.
 - f. - DEENERGIZE COLLECTOR BUS AND INSTALL FDR FUJI-TEMP FROM FUJI C.T. CABINET TO EBASCO PNL.
 - g. - REENERGIZE COLLECTOR BUS.
- L-1** -- ELEVATOR PANEL EL-B75N&S
- a. - INSTALL PB#7 AND FLEXIBLE CDT'S L-1-TEMP, AS SHOWN.
 - b. - DISCONNECT FEEDER AT ATS-75EL AND EL-B75N&S.
 - c. - CUT AND REMOVE CONDUIT AND CONDUCTORS AS SHOWN.
 - d. - INSTALL FEEDER L-1-TEMP, FROM PB#7 TO ATS-75EL AND TO PB#8.
 - e. - SPLICE AND CONNECT FEEDER IN PB#7, PB#8, ATS-75EL AND IN PNL EL-B75N&S. (ENERGIZE).
- L-7** -- MCC-ME75L
- a. - DISCONNECT FEEDER AT SWGR. "L" AND MCC-ME75L.
 - b. - CUT AND REMOVE CONDUIT AND CONDUCTORS AS SHOWN.
 - c. - INSTALL FLEXIBLE CDT'S AS SHOWN.
 - d. - INSTALL FEEDER L-7-TEMP, FROM MCC TO SWGR. "L".
 - e. - SPLICE AND CONNECT FEEDER IN MCC AND AT SWGR. (ENERGIZE).
- R-2** -- ATS-75EL
- a. - DISCONNECT FEEDER AT PANEL EPC-75B AND ATS-75EL.
 - b. - CUT AND REMOVE CONDUIT AND CONDUCTORS AS SHOWN.
 - c. - INSTALL FLEXIBLE CDT'S AS SHOWN.
 - d. - INSTALL FEEDER R-2-TEMP, FROM ATS TO EPC-75B.
 - e. - SPLICE AND CONNECT FEEDER IN ATS AND AT PNL. (ENERGIZE).
- ** CATEGORY "A" OR "B" LOAD OUTAGE-SEE NOTE #4

NOTES

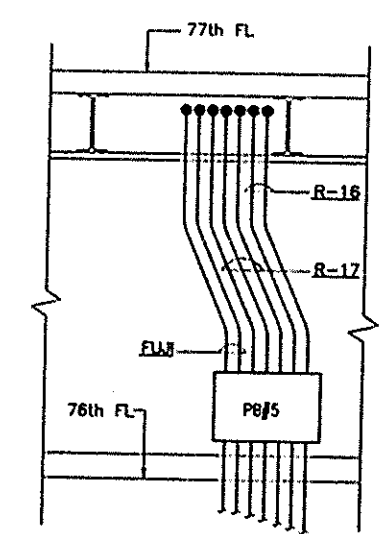
1. FOR LEGEND SEE DWG. #E-1, FOR GENERAL NOTES, ABBREVIATIONS AND LIGHTING FIXTURE SCHEDULE SEE DWG. #E-2.
2. FOR TYPICAL SUBSTATION STAGE I SEQUENCE OF INSTALLATION SEE DWG. #E-4.
3. INTERCEPT AND REROUTE EXISTING WIRING SYSTEM TO PROVIDE SPACE FOR NEW INSTALLATION. PROVIDE JUNCTION BOX AT THE ENDS OF CONDUITS THAT REMAIN. INSTALL WIRE IN REROUTED CONDUIT SECTION AS SHOWN AND SPLICE TO EXISTING WIRES IN JUNCTION BOXES.
4. ALL ELECTRICAL OUTAGES SHALL BE PERFORMED OUTSIDE NORMAL BUILDING OPERATING HOURS. SEE SPECIFICATIONS, DIVISION 1 ENTITLED "CONDITIONS AND PRECAUTIONS" FOR DESCRIPTION OF ELECTRICAL POWER OUTAGE CATEGORIES.
5. FOR CONDUIT AND CABLE SCHEDULE STAGE I SEE DWG. #E-81.

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF ONE OF THE CONTRACT DRAWINGS, CO-1, SITUATING A PART OF CONTRACT NO. WTC-802.071 IN THE FORM IN WHICH SAID DRAWINGS EXISTED AT THE TIME THE SAID CONTRACT WAS EXECUTED BY THE PARTIES.

DATE 6/21/95 *Sullivan A. Adams* SPEC. WRITER
DATE 8/15/95 *Peter L. Jurek* ENGINEER OF DESIGN



SECTION C-C



SECTION B-B

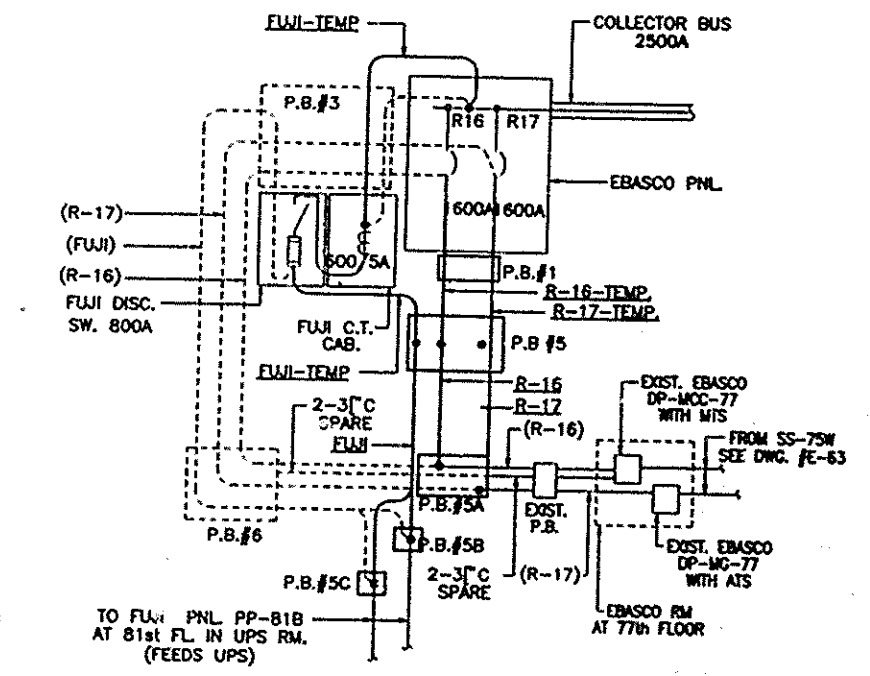


DIAGRAM "A"

RELOCATION OF FDR'S R16, R17 & FUJI
(SEE THIS DWG. & DWG. #E-78 FOR PLANS & SECTIONS)

THE PORT AUTHORITY
OF NY & NJ

Peter L. Jurek
ENGINEERING PROGRAM MANAGER
WORLD TRADE CENTER
Sullivan A. Adams
CHIEF ELECTRICAL ENGINEER

Engineering Department
Design Divisions
The World Trade Center
Electrical/HVAC
Upgrade Program

TOWER ONE AND TWO
LOW VOLTAGE
SUBSTATIONS
CONSTRUCTION AND
INSTALLATION

ELECTRICAL
SUBSTATION SS-75E
STAGE I
REMOVAL AND
RELOCATION PLANS
SHEET #3

No.	Date	Revision	Approved
ROYZMAN FISCHER	ROYZMAN	A.S.	
Designed by	Drawn by	Checked by	
Date 8-1-95	Scale AS NOTED		
Contract Number	Drawing Number		
WTC 802.071	E-80		